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Embedded Automation  
Panel Computers

Penetrating Segmented Market by  
Integrating Control Platforms



- Introduction
- Star Products
- Selection Guide
- Successful Applications



More Information



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# Segmented Automation Panel Solutions

As a leading provider of human machine interface devices, Advantech's HMI products are designed for segmented automation applications to be applied in different industries. With Advantech's HMI, we offer an integrated I/O and control features with HMI/SCADA software which allows efficient and effective integration and open a new era of automation.

Water treatment



BA



MA



Mining



FA



Marine



Railway



Energy



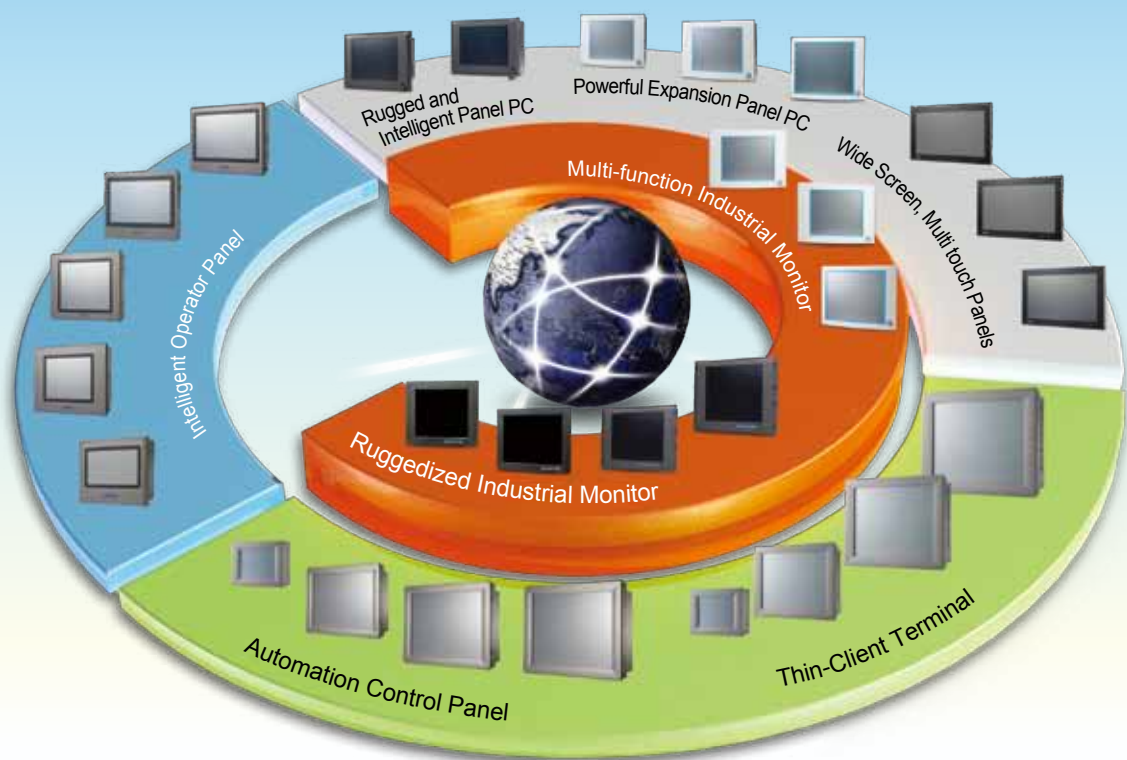
Oil & Gas





# Comprehensive HMI Portfolio

Advantech's comprehensive range of industrial HMI panels has been designed to meet the unique requirements of a wide range of industrial applications. By providing standard and customized products, Advantech supplies their customers with the most flexible automation control panels, thin client panels, industrial monitors and wide screen multi-touch panels. The automation control panels have a compact fanless design and are integrated with multiple IO ports; the thin client panels have a die-cast aluminum alloy front panel and an Intel Atom processor; industrial monitors are rugged units designed to work in tough environments and domain-focus models meet many industrial certification requirements; multi-touch panels not only have built-in intelligent keys for an intuitive UI, but have a 7H hardness anti-scratch display and a 16:9 ratio.



Comprehensive HMI Portfolio



## Automation Control Panels

### Automation Control Panels

- Fanless and compact design
- Integrated with control & IO platforms through Mini PCI-e expansion
- Energy Star certified to reduce power consumption by 30-60%
- "Form and fit" compatible design
- Variety of OS support, including: WES7, Windows XP/XPe, WinCE and Linux

## Thin client Panels

### Thin client Panels

- Designed with Intel® Atom™ processor
- Compact design with die-cast Al alloy front bezel
- Supports Microsoft® Windows WES7/XP/XPe/CE
- Energy Star approved
- Supports external 2.5" SATA HDD kit

## Industrial Monitors

### Industrial Monitor

- -20°C~ 60°C wide operating temperature range
- Ruggedized design is suitable for harsh environments
- Domain-focused for outdoor, transportation, F&B and oil & gas applications
- Meets diverse industrial requirements with C1D2, EN50155 and IP66 certification

## Wide-Screen, Multi-touch Panels

### Widescreen, Multi-touch Series

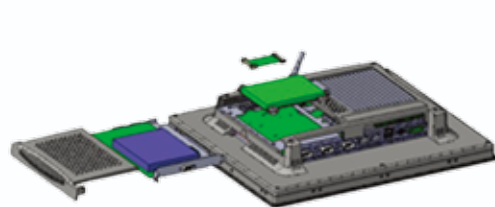
- 16:9 wide screen with PCT multi-touch
- Built-in intelligent and home key button for an intuitive UI
- Anti-scratch surface: 7H hardness
- Front LED indicator to show operating status

# Automation Control Panel

## TPC-71 Series



With an energy saving LED backlight LCD display, the TPC-71H series is designed with the low power consuming Intel® Atom™ D525 processor 1.8GHz as its core; fanless but with powerful kernel. With PCI-e expansion and DIO control support, the TPC-71H series are designed for automation applications as a control panel solution in a variety of industries.



### Compact Expansion

With its compact design, it provides the easiest way to expand the TPC's functionality.



### RTC Battery Backup

RTC backup ensures real time data management in case of accidental power failure.



### Automation IO Control Module

8 x DI/DO design with isolation and Fieldbus control for automation monitoring/control application.



### External Antenna

The External Antenna design provides excellent wireless performance.

### TPC-671H

**6.5" VGA TFT LCD Intel® Atom™ Touch Panel Computer**

- ▶ 6.5" VGA TFT LCD
- ▶ Intel® Atom Z510 1.1 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Mini PCI-e expansion
- ▶ Integrated 16-channel Digital I/O with isolation
- ▶ 1 MB Battery-backed SRAM



### TPC-1071H

**10.4" SVGA TFT LCD Intel® Atom™ Dual-Core D525 Touch Panel Computer**

- ▶ 10.4" SVGA TFT LCD
- ▶ Intel® Atom D525 1.8 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Full-size PCI-e and Mini PCI-e slot
- ▶ Integrated 16-channel Digital I/O with isolation
- ▶ 1 MB Battery-backed SRAM



### TPC-1271H

**12.1" SVGA TFT LCD Intel® Atom™ Dual-Core D525 Touch Panel Computer**

- ▶ 12.1" SVGA TFT LCD
- ▶ Intel® Atom D525 1.8 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Full-size PCI-e and Mini PCI-e slot
- ▶ Integrated 16-channel Digital I/O with isolation
- ▶ 1 MB Battery-backed SRAM



### TPC- 1571H

**15" XGA TFT LCD Intel® Atom™ Dual-Core D525 Touch Panel Computer**

- ▶ 15" XGA TFT LCD
- ▶ Intel® Atom D525 1.8 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Full-size PCI-e and Mini PCI-e slot
- ▶ Integrated 16-channel Digital I/O with isolation
- ▶ 1 MB Battery-backed SRAM



### TPC-1771H

- ▶ 17" SXGA TFT LED LCD
- ▶ Intel® Atom™ D525 1.8 GHz processor
- ▶ Multiple I/O ports for a variety of applications
- ▶ Full-size PCI-e and Mini PCI-e slot
- ▶ Integrated 16-channel Digital I/O with isolation
- ▶ 1 MB Battery-backed SRAM





# Thin-client Terminal

## TPC-50/51 Series

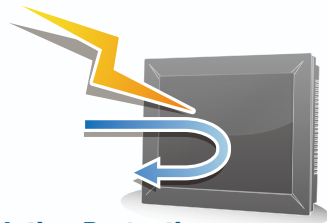


Positioned as a thin-client terminal, the TPC-50 series extend their family to the TPC-51 series with Intel® Atom™ platform for 12.1", 15", 17". They are designed with Intel® Atom™ eMenlow XL processors as their core with a low power consumption and wide operating temperature. This system is fanless, has a slim design and the front bezel is die-cast Al alloy material. This product also provides a -20~60° C wide operating temperature solution and complete isolation protection for its serial ports which makes the TPC platform more durable and reliable.



### Slim and Compact

6cm depth fanless design, easy for space-limited installation.



### Isolation Protection

2KV isolation protection prevents damage from accidental shock, surges or ground loops.



### Wide Temperature

-20°C ~ 60°C wide operating temperature range for harsh environment



### Energy Star Certified

Energy-efficient design with Energy Star Certification.

### TPC-651H/650H

**5.7" VGA TFT LCD Intel® Atom™ Thin Client Computers**

- ▶ 5.7" VGA TFT LED backlight LCD
- ▶ Intel Z520 1.33 GHz / Intel N270 1.6 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Front panel: NEMA4, IP65 certified
- ▶ TPC-651 with COM port isolation
- ▶ TPC-651 with wide operating temperatures



### TPC-1251H/1250H

**12.1" SVGA TFT LCD Intel® Atom™ Thin Client Computers**

- ▶ 12.1" SVGA TFT LED backlight LCD
- ▶ Intel Z520 1.33 GHz / Intel N270 1.6 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Front panel: IP65 certified
- ▶ TPC-1251 with COM port isolation
- ▶ TPC-1251 with wide operating temperature range



### TPC-1551H/1550H

**15" XGA TFT LCD Intel® Atom™ Thin Client Computers**

- ▶ 15" XGA TFT LED backlight LCD
- ▶ Intel Z520 1.33 GHz / Intel N270 1.6 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Front panel: IP65 certified
- ▶ TPC-1551 with COM port isolation
- ▶ TPC-1551 with wide operating temperature range



### TPC-1750H

**17" SXGA TFT LCD Intel® Atom™ Thin Client Computer**

- ▶ 17" SXGA TFT LED backlight LCD
- ▶ Intel N270 1.6 GHz
- ▶ Multiple I/O ports for a variety of applications
- ▶ Front panel: IP65 certified
- ▶ Dual Gigabit Ethernet supported



# Automation Control Panel & Thin-client Terminal

## Selection guide



Model		TPC-671H	TPC-1071H	TPC-1271H	TPC-1571H	TPC-1771H
CPU		Intel® Atom™ Z510 1.1GHz	Intel® Atom™ D525 1.8 GHz	Intel® Atom™ D525 1.8 GHz	Intel® Atom™ D525 1.8 GHz	Intel® Atom™ D525 1.8 GHz
Memory		1GB SO-DIMM DDR2 SDRAM	4GB SO-DIMM DDR3 SDRAM	4GB SO-DIMM DDR3 SDRAM	4GB SO-DIMM DDR3 SDRAM	4GB SO-DIMM DDR3 SDRAM
Display	Display Type	VGA TFT LED LCD	SVGA TFT LED LCD	SVGA TFT LED LCD	XGA TFT LED LCD	SXGA TFT LED LCD
	Display Size	6.5"	10.4"	12.1"	15"	17"
	Max. Resolution	640x480	800x600	800x600	1024x768	1280x1024
	Max. Colors	262 K	262 K	262 K	262 K	262 K
	Luminance cd/m2	700 nits	400 nits	450 nits	350 nits	350 nits
	Viewing Angle (H/V°)	160/140	120/100	160/140	160/140	170/160
	Backlight MTBF(hrs)	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs
Touchscreen		Resistive	Resistive	Resistive	Resistive	Resistive
HDD (Optional)		-	2.5" SATA HDD x 1	2.5" SATA HDD x 1	2.5" SATA HDD x 1	2.5" SATA HDD x 1
Network(LAN)		10/100/1000Base-T x 1	10/100/1000Base-T x 2	10/100/1000Base-T x 2	10/100/1000Base-T x 2	10/100/1000Base-T x 2
I/O ports		RS-232 x 1 RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host)	RS-232 x 2 (with isolation) RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host) PS/2 x 1	RS-232 x 2 (with isolation) RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host) PS/2 x 1	RS-232 x 2 (with isolation) RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host) PS/2 x 1	RS-232 x 2 (with isolation) RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host) PS/2 x 1
CompactFlash		CompactFlash® slot x 1	CompactFlash® slot x 1	CompactFlash® slot x 1	CompactFlash® slot x 1	CompactFlash® slot x 1
Expansion Slots		Mini PCI-E x 1	Mini PCI-E x 1 or PCI-E x 1	Mini PCI-E x 1 or PCI-E x 1	Mini PCI-E x 1 or PCI-E x 1	Mini PCI-E x 1 or PCI-E x 1
Digital Input / Output		-	16-channel Digital I/O with isolation	16-channel Digital I/O with isolation	16-channel Digital I/O with isolation	16-channel Digital I/O with isolation
DC Power Input (Voltage)		18~32V	10~29V	10~29V	10~29V	10~29V
Dimensions		195 x 148 x 44.5 mm (7.68" x 5.83" x 1.75")	287 x 227 x 72.3 mm (11.26" x 8.94" x 2.76")	311 x 237 x 71.6 mm (12.24" x 9.33" x 2.82")	383 x 307 x 78.5 mm (15.08" x 12.09" x 3.09")	414 x 347.5 x 84 mm (16.3" x 13.68" x 3.31")
Weight		0.95 kg (2.1 lbs)	3.5 kg (7.72 lbs)	4.57 kg (10.07 lbs)	5.5 kg (12.13 lbs)	6 kg (13.23 lbs)
Front cover		Front bezel: PC/ABS Resin	Front bezel: Die-cast Aluminum alloy	Front bezel: Die-cast Aluminum alloy	Front bezel: Die-cast Aluminum alloy	Front bezel: Die-cast Aluminum alloy
Operating temperature		0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)
Ingress Protection (Front Panel)		IP65	IP65	IP65	IP65	IP65
Certification		CE, BSMI, CCC, UL, FCC Class A	CE, BSMI, CCC, UL, FCC Class A	CE, BSMI, CCC, UL, FCC Class A	CE, BSMI, CCC, UL, FCC Class A	CE, BSMI, CCC, UL, FCC Class A
Operating System		Microsoft® WES7/WES 2009/ XPE/CE 6.0/CE5.0 /Linux / Android	Microsoft® Windows 7/WES7/ WES 2009/XPE/CE 6.0/Linux / Android	Microsoft® Windows 7/WES7/ WES 2009/XPE/CE 6.0/Linux / Android	Microsoft® Windows 7/WES7/ WES 2009/XPE/CE 6.0/Linux / Android	Microsoft® Windows 7/WES7/ WES 2009/XPE/CE 6.0/Linux / Android



Model		TPC-651H	TPC-1251H/1551H	TPC-650H	TPC-1250H/1550H/1750H
CPU		Intel® Atom™ Z520 1.33 GHz	Intel® Atom™ Z520 1.33 GHz	Intel® Atom™ N270 1.6 GHz	Intel® Atom™ N270 1.6 GHz
Memory		1GB SO-DIMM DDR2 SDRAM	1GB SO-DIMM DDR2 SDRAM	1GB SO-DIMM DDR2 SDRAM	2GB SO-DIMM DDR2 SDRAM
Display	Display Type	VGA TFT LED LCD	SVGA/XGA TFT LED LCD	VGA TFT LED LCD	SVGA/XGA/SXGA TFT LED LCD
	Display Size	5.7"	12.1"/15"	5.7"	12.1"/15"/17"
	Max. Resolution	640 x 480	800 x 600 / 1024 x 768	640 x 480	800x600 / 1024x768 / 1280x1024
	Max. Colors	262 K	262 K	262 K	262 K
	Luminance cd/m2	700 nits	450/350 nits	700 nits	450/350/350 nits
	Viewing Angle (H/V°)	160/140	160/140 160/140	160/140	160/140 / 160/140 / 170/160
	Backlight MTBF(hrs)	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs
Touchscreen		Resistive	Resistive	Resistive	Resistive
HDD		2.5" SATA x 1 Bundled with Extension HDD Kit (Optional)	2.5" SATA x 1 Bundled with Extension HDD Kit (Optional)	-	2.5" SATA x 1 Bundled with Extension HDD Kit (Optional)
Network(LAN)		10/100/1000Base-T x 2	10/100/1000Base-T x 2	10/100/1000Base-T x 1	10/100/1000Base-T x 2
I/O ports		RS-232 x 1 (With Isolation) RS-422/485 x 1 (With Isolation) USB 2.0 x 2	RS-232 x 1 (With Isolation) RS-422/485 x 1 (With Isolation) USB 2.0 x 2	RS-232 x 2 PS/2 x 1 USB 2.0 x 2	RS-232 x 1 PS/2 x 1 USB 2.0 x 2
CompactFlash		CompactFlash® slot x 1	CompactFlash® slot x 1	CompactFlash® slot x 1	CFast slot x 1
Expansion Slots		-	-	-	-
Digital Input / Output		-	-	-	-
DC Power Input		18~32V	18~32V	18~28V	18 ~ 28V / 18 ~ 32V (TPC-1750H)
Dimensions		195 x 148 x 58 mm	311 x 237 x 54 mm 383 x 307 x 58.1 mm	195 x 148 x 58 mm	311 x 237 x 54 mm / 383 x 307 x 58.1 mm / 413.7 x 347.2 x 63.8 mm
Weight		1.43 kg	2.5 kg /3 kg	1.43 kg	2.5 kg / 3 kg /3.5 kg
Front cover		Front bezel: PC + ABS (TPC-651H)/ Die-cast Aluminum Alloy	Front bezel: PC + ABS (TPC-651H)/ Die-cast Aluminum Alloy	Front bezel: PC+ABS	Front bezel: Die-cast Aluminum alloy
Operating temperature		-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	0 ~ 55° C (32 ~ 113° F)	0~55° C (32 ~ 113° F)
Ingress Protection (Front Panel)		IP65	IP65	IP65	IP65
Certification		BSMI, CCC Class A, CE, FCC, UL, Energy Star	BSMI, CCC Class A, CE, FCC, UL, Energy Star	BSMI, CCC Class A, CE, FCC, UL, Energy Star	BSMI, CCC Class A, CE, FCC, UL, Energy Star
Operating System		Microsoft® Windows XP/7/WES7/ WES 2009/ CE 5.0/CE 6.0/ Linux / Android	Microsoft® Windows XP/7/WES7/ WES 2009/ CE 5.0/CE 6.0/ Linux / Android	Microsoft® Windows XP/7/WES7/ WES 2009/ CE 5.0/CE 6.0/ Linux / Android	Microsoft® Windows XP/7/WES7/ WES 2009/ CE 5.0/CE 6.0/ Linux / Android



# Wide Screen, Multi touch Panel

## TPC-40 series, SPC-40 series, and FPM-7000 series



Advantech's new range of star products include several new models in the TPC-40 series (Touch Panel Computer), SPC-40 series (Stationary Panel Computer), and FPM-7000 series (Flat Panel Monitors) range of devices, all of which come with 16:9 wide screen multi-touch displays, high-performance dual-core processors, and true flat front IP65 certified touch panels, making them more elegant and suitable for automotive production. By integrating multi-touch functionality, factory workers can increase operational safety with two-point key confirmation and enhance production flexibility.



### 16:9 Wide screen & Multi-touch

The 16:9 widescreen adds 40% viewing area to display more information for easier management than a traditional 4:3 display. By integrating multi-touch functionality, factory workers can increase operational safety with two-point key confirmation.



### Intelligent Keys & Customized UI

Through touch-like intelligent-key support, thin-client panel computers provide an intuitive GUI & usability to simplify operating steps to save time. Customers can easily customize their own UI by using the updated SDK and API released on the official website.



### Multi-color LED Indicator

With a multi-color LED indicator, factory workers can quickly realize the computer's operating status. The blue bar indicates the system is working while an orange bar shows that the system is in sleep mode.



### Easy-Installation

With a special snap design, the thin-client panel computers can be easily installed by one person thereby speeding up the installation process.

### TPC-1840WP/2140WP

**18.5" WXGA TFT LCD / 21.5" Full HD Multi-Touch Panel Computer with AMD Dual-core processor**

- ▶ 18.5" WXGA / 21.5" Full HD TFT LED LCD display
- ▶ AMD dual-core T56E 1.65GHz with independent GPU, advanced graphical performance
- ▶ 16:9 wide screen with PCT multi-touch
- ▶ Built-in function and home key button used for intuitive UI
- ▶ Anti-scratch surface: 7H hardness
- ▶ Easy Maintenance of Cfast/HDD/Mini-PCIe components by opening side cover
- ▶ Support Mini-PCIe expansion slot
- ▶ Support HDMI for second display application
- ▶ HD Audio supports for alarm application
- ▶ Front LED indicator to show operating status
- ▶ IP65 compliant true flat screen
- ▶ Compact design with Die-cast Magnesium alloy front bezel
- ▶ Fanless cooling system
- ▶ Winner of the 2013 iF product design award



### SPC-1840WP/2140WP

**18.5" WXGA TFT LCD / 21.5" Full HD Stationary Multi-Touch Panel Computer with AMD dual-core processor**

- ▶ 18.5" WXGA / 21.5" Full HD TFT LED LCD display
- ▶ AMD dual-core 1.65GHz processor with independent GPU, advanced graphical performance
- ▶ 16:9 wide screen with PCT multi-touch
- ▶ Built-in function and home key button used for intuitive UI
- ▶ Anti-scratch touch surface: 7H hardness
- ▶ All around IP65 with waterproof M12 connector
- ▶ Support Mini-PCIe expansion slot
- ▶ Front LED indicator to show operating status
- ▶ Fanless cooling system
- ▶ Support standard VESA arm
- ▶ Winner of the 2013 iF product design award



### FPM-7181W/7211W

**18.5" / 21.5" Industrial Monitor with Projected Capacitive Touchscreen, Direct-VGA and DVI Ports**

- ▶ 18.5" WXGA / 21.5" Full HD TFT LED LCD display
- ▶ Truly-flat touch screen with IP65 compliance
- ▶ Slim type design for Panel mount / Wall mount easy installation
- ▶ Supports industrial 24VDC power input
- ▶ Supports panel, wall, desktop and VESA arm mounting
- ▶ OSD control pad on rear panel
- ▶ Projected capacitive touch screen, with multi touch.
- ▶ Robust design with SECC chassis and Magnesium alloy front panel
- ▶ Lockable I/O connectors



Wide Screen, Multi touch Panel  
Selection Guide



Model		TPC-1840WP	TPC-2140WP	SPC-1840WP	SPC-2140WP
CPU		AMD® G-series T56E Processor 1.65G	AMD® G-series T56E Processor 1.65G	AMD® G-series T56N Processor 1.6G	AMD® G-series T56N Processor 1.6G
Memory		4GB SO-DIMM DDR3	4GB SO-DIMM DDR3	4GB SO-DIMM DDR3	4GB SO-DIMM DDR3
Display	Display Type	WXGA TFT LED LCD	Full HD TFT LED LCD	WXGA TFT LED LCD	Full HD TFT LED LCD
	Display Size	18.5"	21.5"	18.5"	21.5"
	Max. Resolution	1366 x 768	1920 x 1080	1366 x 768	1920 x 1080
	Max. Colors	16.7M	16.7M	16.7M	16.7M
	Luminance cd/m2	300	300	300	300
	Viewing Angle (H/V°)	170/160	178/178	170/160	178/178
	Backlight MTBF(hrs)	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs
Touchscreen		Projected capacitive touch	Projected capacitive touch	Projected capacitive touch	Projected capacitive touch
Network (LAN)		10/100/1000Base-T x 2	10/100/1000Base-T x 2	10/100/1000Base-T x 2, M12 connector	10/100/1000Base-T x 2, M12 connector
I/O Ports		RS-232 x 3 RS-422 / 485 x 1 USB 2.0(Host) x 2 Mic in x 1 Line out x 1	RS-232 x 3 RS-422 / 485 x 1 USB 2.0(Host) x 2 Mic in x 1 Line out x 1	RS-232 x 1 , M12 connector USB 2.0 x 1 , M12 connector 24VDC connector. M12 connector	RS-232 x 1 , M12 connector USB 2.0 x 1 , M12 connector 24VDC connector. M12 connector
HDD (Optional)		2.5" SATA HDD	2.5" SATA HDD	2.5" SATA HDD	2.5" SATA HDD
Intelligent Keys		Quick access through built-in front bezel function and home key button	Quick access through built-in front bezel function and home key button	Quick access through built-in front bezel function and home key button	Quick access through built-in front bezel function and home key button
CompactFlash Slots		CFast slot x 1	CFast slot x 1	-	-
Expansion Slots		Full-sized mini PCI-E x 1	Full-sized mini PCI-E x 1	Full-sized mini PCI-E x 1	Full-sized mini PCI-E x 1
DC Power Input (Voltage)		18 ~ 32 V	18 ~ 32 V	24V	24V
Ingress Protection (Front Panel)		IP65	IP65	All around IP65	All around IP65
Enclosure		Front bezel: Die-cast magnesium alloy Back housing: PC/ABS Resin	Front bezel: Die-cast magnesium alloy Back housing: PC/ABS Resin	Front bezel: Die-cast aluminum alloy Back housing: Die-cast aluminum alloy	Front bezel: Die-cast aluminum alloy Back housing: Die-cast aluminum alloy
Mounting		Panel mount	Panel Mount	Desktop, wall, VESA arm	Desktop, wall, VESA arm
Operating Temperature		0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)
Storage Temperature		-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
Dimension		488.1 x 309.1 x 56.7 mm (19.2" x 12.2" x 2.2")	580.7 x 355.3 x 56.7 mm (22.8" x 14" x 2.2")	488 x 309 x 65 mm (19.2" x 21.2" x 2.6")	558.4 x 349.8 x 65 mm (21.98" x 13.77" x 2.56")
Weight		7 kg (15.44 lbs)	8 kg (17.64 lbs)	8 kg (17.64 lbs)	9 kg (19.8 lbs)
Certification		BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL
Operating System		Microsoft® Windows XP/7/8/WES7/ WES 2009/CE 6.0/Linux	Microsoft® Windows XP/7/8/WES7/ WES 2009/CE 6.0/Linux	Microsoft® Windows XP/7/8/WES7/ WES 2009/CE 6.0/Linux	Microsoft® Windows XP/7/8/WES7/ WES 2009/CE 6.0/Linux



Model		FPM-7181W	FPM-7211W
CPU		-	-
Memory		-	-
Display	Display Type	WXGA TFT LED LCD	Full HD TFT LED LCD
	Display Size	18.5"	21.5"
	Max. Resolution	1366 x 768	1920 x 1080
	Max. Colors	16.2M	16.7M
	Luminance cd/m2	300	300
	Viewing Angle (H/V°)	170/160	178/178
	Backlight MTBF(hrs)	50,000 hrs	50,000 hrs
Video Port		VGA & DVI-D port	VGA & DVI-D port
Touchscreen		Projected Capacitive touch	Projected Capacitive touch
Network (LAN)		-	-
I/O Ports		RS-232 and USB interface for touch screen	RS-232 and USB interface for touch screen
HDD (Optional)		-	-
Intelligent Keys		-	-
CompactFlash Slots		-	-
Expansion Slots		-	-
Power Input Voltage		Phoenix Jack: 24 V <sub>DC</sub> input	Phoenix Jack: 24 V <sub>DC</sub> input
DC Power Input (Voltage)		external 57 W powern adapter, with 100 ~ 240 V <sub>AC</sub> input and 12 V <sub>DC</sub> @ 4.75 A output	external 57 W powern adapter, with 100 ~ 240 V <sub>AC</sub> input and 12 V <sub>DC</sub> @ 4.75 A output
Ingress Protection (Front Panel)		IP65	IP65
Enclosure		Front panel: Die-cast magnesium alloy Rear cover: SECC	Front panel: Die-cast magnesium alloy Rear cover: SECC
Mounting		Desktop, wall, VESA arm	Desktop, wall, VESA arm
Operating Temperature		0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Storage Temperature		-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
Dimension		488 x 309 x 45.7 mm (19.2" x 21.2" x 1.8")	558.4 x 349.8 x 47.7 mm (22" x 13.78" x 1.88")
Weight		6 kg (13.2 lbs)	8 kg (17.6 lbs)
Certification		BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL
Operating System		Microsoft® XP, Vista,7,8, XPe, CE and Linux	Microsoft® XP, Vista,7,8, XPe, CE and Linux



# Entry Level Industrial Monitor

## FPM-2000 series

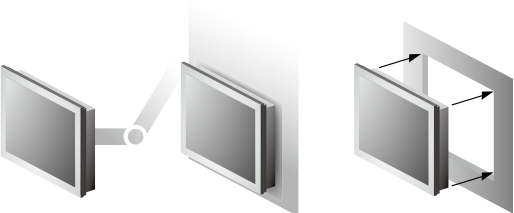


The FPM-2000 series with 12",15"and 17" screens have been designed to fit into areas of limited space without compromising on quality. Their ruggedized all round metal design with IP65 certified fronts ensure that even in harsh environments these monitors will continue to work. The lockable I/O connector design secures the cables and reduces the risk of accidental disconnects. All models have been designed with the same modern look as others in the FPM series and have a reduced front bezel and smaller cut-out dimension size.



### Anti-Glare

The anti-glare design cuts down on the amount of light that reflects off the display. This makes the viewing of images and a colors a better experience.



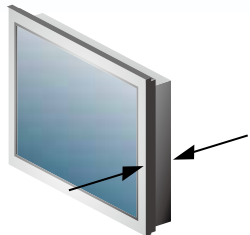
### Various Mounting Methods

The FPM series are designed to support various mounting methods: wall mount, panel mount, VESA mount, desk mount and rack mount to fit different user environments.



### Combo Interface for TouchPanel

Supports both RS-232 and USB interface for touch panel connection to provide flexibility.



### Compact Design

The slim and compact design fits into areas of limited space without compromising on quality.

### FPM-2120G

**12"SVGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port**

- ▶ 12" SVGA TFT LCD with LED backlight
- ▶ Robust design with aluminum front panel and SECC metal rear cover
- ▶ Anti-glare screen with tempered glass
- ▶ Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- ▶ Combo RS-232 & USB interface for touchscreen function



### FPM-2150G

**15" XGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port**

- ▶ 15" XGA TFT LCD with LED backlight
- ▶ Robust design with aluminum front panel and SECC metal rear cover
- ▶ Anti-glare screen with tempered glass
- ▶ Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- ▶ Combo RS-232 & USB interface for touchscreen function



### FPM-2170G

**17" XGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port**

- ▶ 17" XGA TFT LCD with LED backlight
- ▶ Robust design with aluminum front panel and SECC metal rear cover
- ▶ Anti-glare screen with tempered glass
- ▶ Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- ▶ Combo RS-232 & USB interface for touchscreen function

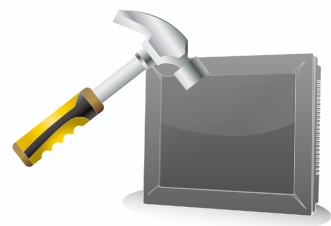


# Ruggedized Industrial Monitor

## FPM-3000 Series



The FPM-3000 series is a particularly rugged and reliable wide temperature industrial monitor for a variety of industry applications. Equipped with a hard anodized coating, stainless steel chassis, and -20 to 60°C operating temperature, it can satisfy the demands of a wide range of harsh industrial applications. These models also feature enhanced 5-wire resistive touch panels and system ground isolation protection to enhance the reliability, lockable OSD keys on the front panel with two user-defined contrast/brightness settings.



### Die-cast Bezel with Stainless Housing

Hard-anodized front bezel design with stainless steel 304 material housing.



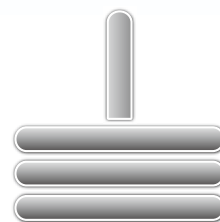
### Energy Star Certified

With 33% power consumption reduction and Energy Star Certification.



### Wide Temperature

With an operating temperature range of -20°C ~ 60°C it is designed for use in the harshest environments.



### Grounding Protection

Chassis grounding and power ground protection design to avoid in-rush current damage monitor.

### FPM-3121G

**12.1" SVGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI and Wide Operating Temperature**

- ▶ 12.1" SVGA LED backlight LCD with low power consumption
- ▶ Increased reliability with enhanced 5-wire resistive touch sensor
- ▶ Anti-glare screen with tempered glass
- ▶ Supports VGA/DVI input, dual touch interfaces and two power inputs
- ▶ Front lockable OSD membrane keys with user-defined brightness setting
- ▶ Supports panel, VESA, wall and desktop stand mounting



### FPM-3151G

**15" XGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI and Wide Operating Temperature**

- ▶ 15" XGA LED backlight LCD with low power consumption
- ▶ Increased reliability with enhanced 5-wire resistive touch sensor
- ▶ Anti-glare screen with tempered glass
- ▶ Supports VGA/DVI input, dual touch interfaces and two power inputs
- ▶ Front lockable OSD membrane keys with user-defined brightness setting
- ▶ Supports panel, VESA, wall and desktop stand mounting



### FPM-3171G

**17" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI and Wide Operating Temperature**

- ▶ 17" SXGA LED backlight LCD with low power consumption
- ▶ Increased reliability with enhanced 5-wire resistive touch sensor
- ▶ Anti-glare screen with tempered glass
- ▶ Supports VGA/DVI input, dual touch interfaces and two power inputs
- ▶ Front lockable OSD membrane keys with user-defined brightness setting
- ▶ Supports panel, VESA, wall and desktop stand mounting



### FPM-3191G

**19" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI**

- ▶ 19" SXGA CCFL backlight LCD with enhanced 5-wire resistive touch sensor
- ▶ Anti-glare screen with tempered glass
- ▶ Supports VGA/DVI input, dual touch interfaces and two power inputs
- ▶ Front lockable OSD membrane keys with user-defined brightness setting
- ▶ Supports panel, VESA, wall and desktop stand mounting





# Multi-function Industrial Monitor

## FPM-5000 Series



The FPM-5000G series provides 15", 17" and 19" color TFT LCD flat panel monitors specifically designed for industrial applications. With a viewing size from 15" to 19", they present ample display areas as well as vivid and sharp images. It features Direct-VGA & DVI-D signal transmission, which allows VGA control cards to be used in your system. The onscreen display allows users to adjust the images on the screen with two user-defined settings. The front access USB connector provides easy access the controller, and the industrial 10-30 V<sub>DC</sub> wide range power support makes this product an excellent option for Factory and Machine Automation display solutions.



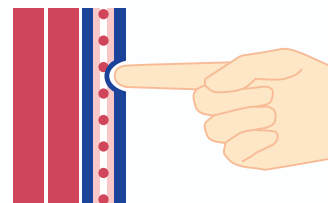
### Dual Input Functions

Supports VGA/DVI input, dual touch interfaces and two power inputs.



### Lockable IO Connector

ALL I/O connectors such as USB, VGA, DVI and AC power adapter cables are lockable which reduces the risk of accidental disconnects.



### Durable Touch Screen

5-wire exclusive enhance touch feature & high activation force increase normal 250g to 750g.



### Front USB Access

Front accessible USB user friendly design allows easy maintenance in the machine cabinet.

### FPM-5151G/5152G

**15" XGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI**

- ▶ 15" XGA TFT LCD with resolution up to 1024 x 768
- ▶ Lockable OSD keys with 2 user-defined contrast/brightness settings
- ▶ Flat-sealed front panel
- ▶ Robust design with anti-rust chassis and aluminum die-cast front panel
- ▶ Front accessible USB connector
- ▶ Supports industrial 10-30 V<sub>DC</sub> power input
- ▶ Support display port input interface on FPM-5152G



### FPM-5171G/5172G

**17" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI**

- ▶ 17" SXGA TFT LCD with resolution up to 1280 x 1024
- ▶ Lockable OSD keys with 2 user-defined contrast/brightness settings
- ▶ Flat-sealed front panel
- ▶ Robust design with anti-rust chassis and aluminum die-cast front panel
- ▶ Front accessible USB connector
- ▶ Supports industrial 10-30 V<sub>DC</sub> power input
- ▶ Support display port input interface on FPM-5172G



### FPM-5191G/5192G

**19" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA, DVI**

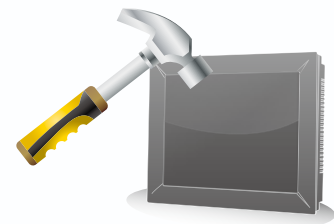
- ▶ 19" SXGA TFT LCD with resolution up to 1280 x 1024
- ▶ Lockable OSD keys with 2 user-defined contrast/brightness settings
- ▶ Flat-sealed front panel
- ▶ Robust design with anti-rust chassis and aluminum die-cast front panel
- ▶ Front accessible USB connector
- ▶ Supports industrial 10-30 V<sub>DC</sub> power input
- ▶ Support display port input interface on FPM-5192G



# Domain-focused Platform



With ultra rugged designs and industrial certifications such as C1D2, EN50155 and IP66, these products are compact and heavy-duty, enabling them to meet the needs of a diverse range of industrial requirements such as outdoor, F&B, railway and oil & gas applications.



## 316L Stainless Steel

Provides better anti-oxidation, anti-corrosion and anti-bacterial features than normal 304L stainless steel.



## Certification

With C1D2, EN50155 and IP66 certification, domain-focused HMI meets diverse industrial requirements.



## High Brightness with Optical Bonding

Providing superior sunlight readability with 1000 nits industrial grade LCD display and optical bonding solution is perfect for applications in semi-outdoor or outdoor environments.



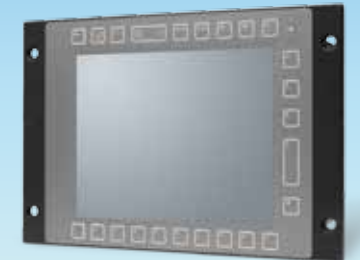
## User-friendly Design

Use touch gestures to disable or enable touch functionality while cleaning without switching off the power.

## TPC-8100TR

### 10.4" EN50155 Railway Panel Computer

- ▶ Alternative keypad control in front bezel
- ▶ Mother board / Daughter board with coating for weather proof
- ▶ All around IP65 with waterproof M12 connector
- ▶ Ruggedized enclosure with Die-cast Aluminium alloy
- ▶ Wide operating temperature: -30 ~ 70°C
- ▶ EN50155 Compliance for railway application



## TPC-1251SR/1551SR

### 12.1" SVGA / 15" XGA High Brightness LCD Intel® Atom™ Touch Panel PC

- ▶ Sunlight readable and high luminance solution
- ▶ 12.1" SVGA / 15" XGA High resolution LED backlight
- ▶ Wide operating temperature: -20 ~ 60°C
- ▶ Supports Microsoft® Windows XP / WES7/ XPe / CE / Linux
- ▶ Energy Star approved



## FPM-3151SR

### 15" XGA High Brightness Industrial Monitor w/ Resistive Touchscreen, Direct-VGA, DVI and Wide Operating Temperature

- ▶ High luminance solution for sunlight readable
- ▶ 15" XGA high resolution LED backlight
- ▶ Wide operating temperature: -20 ~ 60°C
- ▶ Increased reliability with enhanced 5-wire resistive touch sensor and ITO film
- ▶ Supports VGA/DVI input, dual touch interfaces and two power inputs



## FPM-8151H / FPM-3171S / FPM-3191S

### 15" XGA Industrial Monitor for Hazardous Location, with 316L Stainless Steel Front Panel

- ▶ UL CID2 certified for hazardous locations
- ▶ 15" XGA TFT LCD with LED backlight
- ▶ Stainless steel 316L front panel
- ▶ IP65 compliant front panel
- ▶ Wide operating temperature: -20 ~ 60°C



### 17"/19" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA and DVI Ports

- ▶ Robust design with 316L level stainless steel chassis and front panel
- ▶ Supports panel, wall, desktop, VESA arm mounting



FPM Series Selection Guide



Model		FPM-2120G/2150G/2170G	FPM-3121G/3151G/3171G/3191G	FPM-5151G/5171G/5191G	FPM-5152G/5172G/5192G
CPU		-	-	-	-
Memory		-	-	-	-
Display	Display Type	12" SVGA / 15" XGA / 17" XGA	12" SVGA / 15" XGA / 17" SXGA / 19" SXGA	15" XGA / 17" SXGA / 19" SXGA	15" XGA / 17" SXGA / 19" SXGA
	Display Size	12"/15"/17"	12"/15"/17"/19"	15"/17"/19"	15"/17"/19"
	Max. Resolution	800x600 / 1024x768 / 1024x768	800x600 / 1024x768 / 1280x1024 / 1280x1024	1024 x 768 / 1280 x 1024 / 1280 x 1024	1024 x 768 / 1280 x 1024 / 1280 x 1024
	Max. Colors	16.2M / 16.2M / 16.7M	16.2M / 16.2M / 16.7M / 16.7M	16.2M / 16.7M / 16.7M	16.2M / 16.7M / 16.7M
	Luminance cd/m2	450 / 400 / 350	450 / 350 / 350 / 350	400 / 350 / 350	350 / 350 / 350
	Viewing Angle (H/V°)	160/140 / 160/140 / 170/160	160/140 / 160/140 / 170/160 / 170/160	160/140 / 170/160 / 170/160	160/140 / 170/160 / 170/160
	Backlight MTBF(hrs)	50,000	50,000	50,000	50,000
Video Port		VGA	VGA/DVI	VGA/DVI	Display port
Touchscreen		Combo	Combo	Combo	USB
Network(LAN)		-	-	-	-
I/O ports		-	-	-	-
HDD(Optional)		-	-	-	-
OSD(onscreen display)		On rear side with lockable function	On front Panel with lockable function	On rear side with lockable function	On rear side
CompactFlash Slots		-	-	-	-
Expansion Slots		-	-	-	-
DC Power Input		12v	12v & 24v	10-30v	18-32v
Ingress Protection(Front Panel)		IP65	IP65	IP65	IP65
Enclosure		Front panel: Aluminum with coating Rear cover: SECC coating chassis	Front panel: Aluminum with hard anodizing coating Rear cover : Stainless steel Ground Isolation Protection	Front panel: Aluminum and flat-sealed Rear cover: Anti-rust coating	Front panel: Aluminum and flat-sealed Rear cover: Anti-rust coating
Mounting		Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm
Operating temperature		0~50°C	-20~60°C / -20~60°C / -20~60°C / 0~50°C	0~50°C	0~50°C
Storage Temperature		-20~60°C	-30~80°C / -30~80°C / -30~80°C / -20~60°C	-20~60°C	-20~60°C
Dimension		311 x 237 x 40.63mm / 383 x 307 x 48 mm / 413.72 x 347.22 x 52.13mm	312 x 224 x 60 mm / 422 x 310 x 70 mm / 482 x 354.8 x 63.9mm / 482 x 399 x 67 mm	449.92 x 315.63 x 50.5 mm / 481.9 x 355.9 x 55 mm / 481.93 x 384.6 x 59 mm	449.92 x 315.63 x 50.5 mm / 481.9 x 355.9 x 55 mm / 481.93 x 384.6 x 59 mm
Weight		4kg / 4.5kg / 5.6kg	4.07kg / 7.73kg / 9.25kg / 10.65kg	6kg / 8kg / 10kg	6kg / 8kg / 10kg
Certification		BSMI, CCC, CE, FCC Class A, UL	FPM-3121G/3151G : BSMI, CCC, CE, FCC Class A, UL Energy Star FPM-3171G/3191G : BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL	BSMI, CCC, CE, FCC Class A, UL
Operating System		Windows XP, Vista, 7, 8, XPe, CE and Linux	Windows XP, Vista, 7, 8, XPe, CE and Linux	Windows XP, Vista, 7, 8, XPe, CE and Linux	Windows XP, Vista, 7, 8, XPe, CE and Linux
Touch Operation System		PenMount 6000	FPM-3121G/3151G : PenMount 6000 FPM-3171G/3191G : Elo Touch	PenMount 6000	PenMount 6000

Domain-focused selection guide



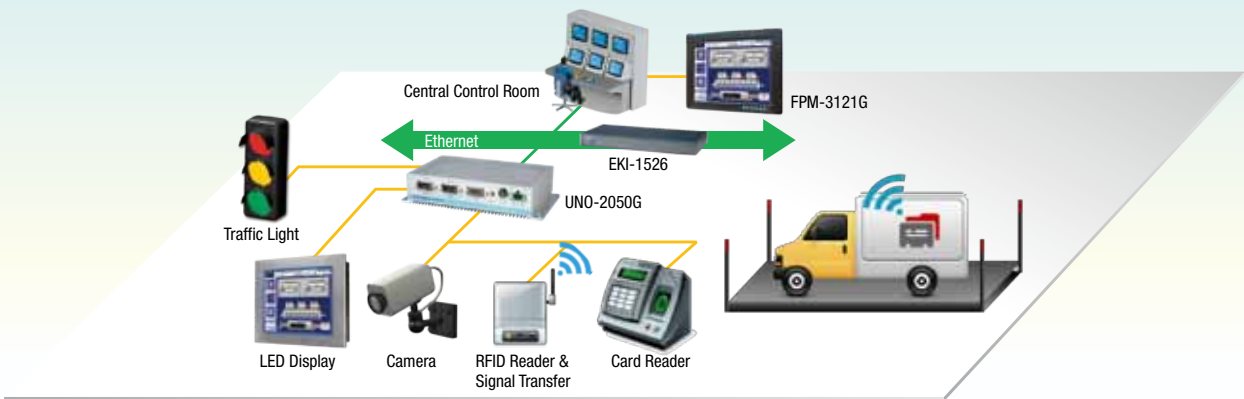
Model		TPC-1251SR/1551SR	FPM-3151SR	FPM-3171S/3191S	FPM-8151H	TPC-8100TR
CPU		Intel Atom 1.33 GHz with 512KB cache	-	-	-	Intel ATOM N2600 Dual core processor 1.6G
Memory		1GB SO-DIMM DDR2 667 SDRAM	-	-	-	4GB SO-DIMM DDR3 SDRAM
Display	Display Type	SVGA / XGA	XGA	SXGA	XGA	SVGA
	Display Size	12.1"/15"	15"	17"/19"	15"	10.4"
	Max. Resolution	800 x 600 / 1024 x 768	1024x768	1280 x 1024	1024 x 768	800 / 600
	Max. Colors	262 K	16.2 M	16.2 M	16.2 M	262 K
	Luminance cd/m2	1000	1000	350/300	350	400
	Viewing Angle (H/V°)	110/160 / 120/140	125/140	170/160 / 170/160	160/140	160/140
	MTBF(hrs)	50,000	50,000	50,000	50,000	50,000
Touchscreen		Resistive	Combo	Resistive	Resistive	internal USB
Network(LAN)		10/100/1000Base-T x 2	-	-	-	100/1000 Base x 2
I/O ports		RS-232 x 1 (with isolation) RS-422/485 x 1 (with isolation) USB 2.0 x 2 (Host)	VGA/DVI-D	VGA & DVI-D	VGA & DVI-D	RS-232 x 2(connection: M12 A-coded, 8-pin male) RS-422/485 x 2(with isolation, connection: M12 A-coded, 8-pin male) USB 2.0 x 2(connection: M12 A-coded, 8-pin female) Audio x 1(with Internal Buzzer, Line out, connection: M12 A-coded, 8-pin male) Power connector x 1(connection: M12 A-coded, 5-pin male)
HDD(Optional)		2.5" SATA HDD x 1	-	-	-	-
OSD(onscreen display)		-	On front panel with lockable function	On front panel with lockable function	On front panel with lockable function	-
CompactFlash Slots		CompactFlash Slot x 1	-	-	-	build in 16G Cfast
Expansion Slots		-	-	-	-	-
DC Power Input		18~32v	12v & 24v	24v	24v	110v
Ingress Protection(Front Panel)		IP65	IP65	IP65	IP65	all around IP65
Enclosure		Front bezel: Die-cast Aluminum alloy Back housing: SECC	Front panel: Aluminum with hard anodizing coating Rear cover : Stainless steel Ground Isolation Protection	Front panel: Stainless steel with 316L level Rear cover: Stainless steel chassis	Front panel: 316L Stainless steel Rear cover : Stainless steel Ground Isolation Protection	Front bezel: Die-cast Aluminium alloy Back housing: Die-cast Aluminium alloy
Mounting		Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm	Panel, wall, desktop, VESA arm	Panel, VESA arm
Operating temperature		-20~60°C	-20~60°C	-20~60°C / 0~50°C	-20~60°C	-30~70°C
Storage Temperature		-30~80°C	-30~80°C	-30~80°C / 20~80°C	-20~60°C	-30~70°C
Dimension		311 x 237 x 54 mm 383 x 307 x 58.1 mm	422 x 310 x 70 mm	462.8 x 378.4 x 63.9 mm 489.3 x 408.6 x 68 mm	422 x 338 x 68 mm	345 x 227 x 85 mm
Weight		2.5 kg / 3 kg	7.73 kg	13.1 kg / 15 kg	8.5 kg	5 kg
Certification		BSMI, CCC, CE, FCC Class A, UL	CE, FCC Class A, CCC, UL, Energy Star	CE, FCC Class A, BSMI, CCC, UL	CE, FCC Class A, UL C1D2, BSMI, CCC	CE, FCC Class A, CCC, UL, EN50155
Operating System		Windows XP/WES7/XPe/CE/Linux	Windows 2000, XP, Vista, 7, 8, XPe, CE and Linux	Windows 2000, XP, Vista, 7, 8, XPe, CE and Linux	Windows 2000, XP, Vista, 7, 8, XPe, CE and Linux	Windows XP,7, 8, WES 2009, WES7, CE 6.0 and Linux

# HMI Application Story Overview

## Coal Mine Automation System of Weight Checking and Fraud Prevention



Coal is transported from the mine to a warehouse therefore, to ensure that the correct weight and products arrive at the warehouse, a method of checking is required. To build the platform for this application, Advantech's industrial touch panel monitor, FPM-3121G which features wide-temperature and sunlight readability making it especially suitable for outdoor applications. All the information is collected and transmitted via the EKI-1526 to the UNO-2050G, and the data is then sent to the central control room, and is shown not only on the FPM-3121G monitor. The design of Advantech's products allows for stable and reliable operation in ultra-harsh outdoor environments such as coal mines

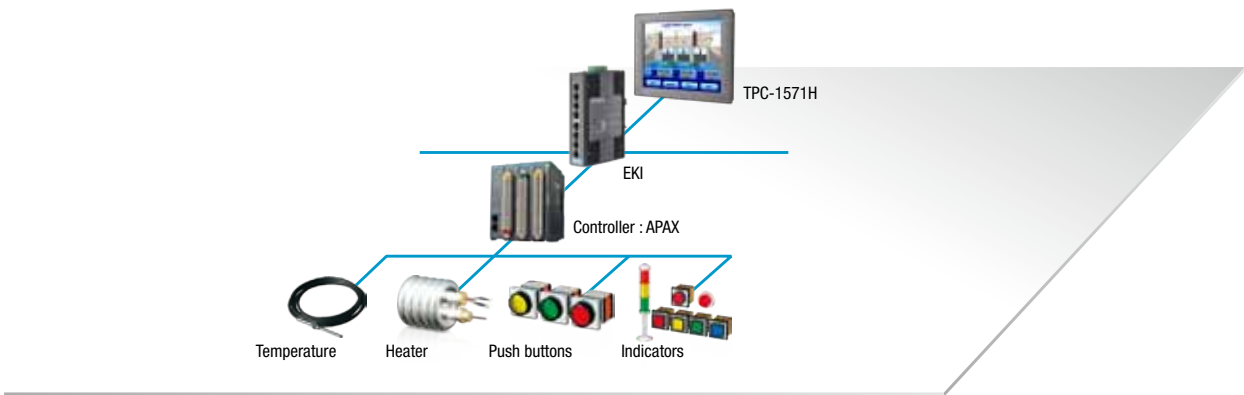


## Batch control system in Silicon Crystal grower & Diffusion furnace Application



In order to achieve a high quality solar cell, Silicon crystal material treatment & diffusion furnace are raw material treatment process devices. It is a very high temperature control furnaces, around 1600 degC , and need a high reliable, stability & powerful operation station for operating, monitoring & integration to control center .

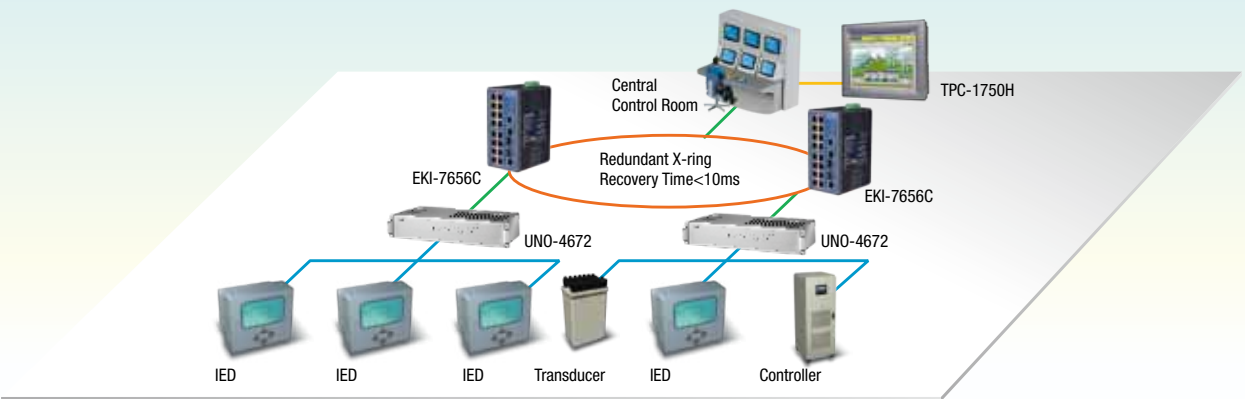
For building the platform for this application, Advantech's Embedded Automation Panel TPC-1571H is used as master workstation in control center to monitor the information transmitted via the EKI-1526 and Supervisor s/w WebAccess, to operate the process through APAX-5000 Amonet Network for motion control. This design of Advantech's products allows stable and reliable operation in such ultra-harsh environment for Silicon crystal material treatment & diffusion furnace application.



## Surveillance and Monitoring System over Power Substations in Beijing Subway



Advantech's Embedded Automation Panel TPC-1750H is used in the power substations of one of the Beijing Subway lines. In each substation, there are meters and other terminal devices monitoring the status of the transformer, the use of power, temperature and pressure. To monitor the substations' activity from a control room, the Advantech TPC-1750H 17" SXGA TFT LCD Intel® Atom™ Thin Client Computer together with EKI-7656C and uno-4672 was proposed, offering remote out-of-band manageability, improved data transmission and security, and energy efficient performance. It is the excellent choice for subway substation monitoring and surveillance systems.



## MES control system for automotive engine assembling line in China



With several production lines at their manufacturing plant, a global car manufacturer was keen to speed up their productivity whilst increase quality and reduce error rate. For workers to have the flexibility to choose from a range of components, management required workers to have access to multi-touch panel computers to improve the tracking of each part of the assembly line. If there was a failure during any part of the process the client required that assembly workers could fix it quickly through the use of the panel so that the line wouldn't be held up.

With an outstanding price performance ratio, the iF Award winning TPC-1840WP and TPC-2140WP are exemplified not only by their appearance but also by their intuitive user interface. With their two pale blue soft-keys that, when lightly touched, give users quick and easy access to the information they need, the TPC-1840WP and 2140WP allow convenient viewing of information. To further aid this, both models feature wide screens with a ratio of 16:9 and multi-touch capabilities to provide more screen area and greater control as well as viewing of information.

Our client tested several other manufacturers during the consultation process and it was decided that Advantech offered the best overall solution with the most up-to-date panel PCs, the ability of these systems to be installed anywhere in the world and be guaranteed of the same quality of service they are receiving in their Italian plant; Advantech's post-sales technical support gives the customer assurances that any difficulties will be handled quickly and efficiently to ensure that there is no loss of services; and finally the all-in-one solution which not only included the hardware but also the installation and configuration of the clients bespoke software.